

WHAT IS CLAIMED IS:

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1. A method of manufacturing a magnetic recording medium comprising the steps of:

- 10 a) laminating an underlayer, a magnetic layer for recording, and a protection layer of amorphous carbon on a substrate of said magnetic recording medium in turn; and
- 15 b) repeating a process to said protection layer of amorphous carbon comprising an application process of applying a lubricant, a subsequent ultraviolet rays treatment process, and a subsequent washing process for removing said lubricant which is not connected to said protection layer of amorphous carbon plural times.

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2. The method as claimed in claim 1, wherein said lubricant is a compound of the

25 perfluoro-polyether with an end-group including piperonyl or hydroxyl group.

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3. A method of manufacturing a magnetic recording medium comprising the steps of:

- 35 a) laminating an underlayer, a magnetic layer for recording, and a protection layer of amorphous carbon on a substrate of said magnetic recording medium in turn; and
- b) repeating a process to said protection

layer of amorphous carbon comprising an application
process of applying a lubricant, an subsequent heat
treatment process, and a subsequent washing process
for removing said lubricant which is not connected,
5 to said protection layer of amorphous carbon plural
times.

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4. The method as claimed in claim 3,
wherein said lubricant is a compound of the
perfluoro-polyether with an end-group including
hydroxyl group.

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5. A method of manufacturing a magnetic
20 recording medium comprising the steps of:
a) laminating an underlayer, a magnetic
layer for recording, and a protection layer of
amorphous carbon on a substrate of said magnetic
recording medium in turn; and
25 b) repeating a process to said protection
layer of amorphous carbon comprising an application
process of applying a lubricant, and a subsequent
ultraviolet rays treatment process plural times.

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6. The method as claimed in claim 5,
wherein said lubricant is a compound of the
35 perfluoro-polyether with an end-group including
piperonyl or hydroxyl group.

7. A method of manufacturing a magnetic recording medium comprising the steps of:

- 5 a) laminating an underlayer, a magnetic layer for recording, and a protection layer of amorphous carbon on a substrate of said magnetic recording medium in turn; and
- 10 b) repeating a process to said protection layer of amorphous carbon comprising an application process of applying a lubricant, and a subsequent heat treatment process plural times.

15 8. The method as claimed in claim 7, wherein said lubricant is a compound of the perfluoro-polyether with an end-group including hydroxyl group.

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- 25 9. A magnetic recording medium having a lubricant layer comprising bonding sub-layer on a surface of said magnetic recording medium and manufactured by a process comprising the steps of
- 30 a) laminating an underlayer, a magnetic layer for recording, and a protection layer of amorphous carbon on a substrate of said magnetic recording medium in turn; and
- 35 b) repeating plural times a process to said protection layer of amorphous carbon comprising an application process of applying a lubricant which is a compound of the perfluoro-polyether with an end-group including piperonyl or hydroxyl group, and a subsequent ultraviolet rays treatment process, or
- b) repeating plural times a progress to said

protection layer of amorphous carbon comprising an application process of applying a lubricant which is a compound of the perfluoro-polyether with an end-group including piperonyl or hydroxyl group, a subsequent ultraviolet rays treatment process, and a further subsequent washing process for removing said lubricant which is not connected to said protection layer of amorphous carbon.

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10. A magnetic recording medium having a lubricant layer comprising bonding sub-layer on a surface of said magnetic recording medium and manufactured by a process comprising the steps of:

a) laminating an underlayer, a magnetic layer for recording, and a protection layer of amorphous carbon on a substrate of said magnetic recording medium in turn; and

b) repeating plural times a process to said protection layer of amorphous carbon comprising an application process of applying a lubricant which is a compound of the perfluoro-polyether with an end-group including hydroxyl group, and a subsequent heat treatment process, or b) repeating plural times a process to said protection layer of amorphous carbon comprising an application process of applying a lubricant which is a compound of the perfluoro-polyether with an end-group including hydroxyl group, a heat treatment process, and a further subsequent washing process for removing said lubricant which is not connected to said protection layer of amorphous carbon.

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